

IOOS and the Marine Navigation Services Community July 30, 2004 Public Record

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Dr. Richard Spinrad's Opening Remarks

First I want to thank all of you for being here. This is the first of a series of sector-oriented meetings. The theme of today is "IOOS – forging a partnership and making it work." I want to thank Helen Brohl for helping to sponsor this workshop.

The best way to start this is to talk about this being an exciting time for the maritime community – I want this to be an exciting, enlightening, productive day.

I'm here for two reasons – one started 26 blocks from here four decades ago. I had a teacher in public school who got me interested and I have ever since been laser locked into the oceanography community. This is home and where I got hooked on marine science.

Second reason is that I have seen what we can do. I have been in the research community, owned my own business, worked for a non-governmental organization (CORE), been part of the national ocean partnership, worked for three Federal agencies on both the research and operational side.

We have extraordinary hurdles to integrate and coordinate our various systems. The only way we can make evident the system is to have the emerging codification of an Integrated Ocean Observing System (IOOS).

When I look at what we want to accomplish here, I think of two timeframes – next six hours and the next six years.

Our measure of performance in the next six hours is to a raised level of awareness of everyone in the room – awareness of what the IOOS will be and what the requirements and needs of navigation services community are. We need a heightened level of awareness and a willingness to do something with that awareness. It's not good enough to just raise awareness; we also have to agree to take actions from this workshop. We have NOAA folks peppered here. We will take actions. There are also things I hope others will take action on from this meeting.

Our measure of performance over the next six years is linked to the question, "what will be different when I or someone in my position stands here in 6 years?" You will hear a lot of specifics. I am viewing it in 3 categories – improved safety, enhanced economic benefit and elevated environmental stewardship as a result of our collective action.

Dr. Richard Spinrad's Opening Remarks (continued)

In terms of improved safety, I hope we see reduced groundings and accidents, as well as, lives saved and property protected, predicting warnings for tornados, etc.

We will see enhanced economic benefit – commercial shippers' bottom line, enhanced benefits to tourism, emergence of new product and service providers, more goods and services in the private sector. As I said in a hearing for the House Resources Committee, we cannot afford not to implement this kind of system. The Gulf of Maine has seen a 5 to 1 return on this kind of observing system.

Elevated environmental stewardship is harder to quantify. We can achieve better capabilities for planning and managing. Long-term observation of water levels and global sea level rise is a critical component of protecting our wetlands.

Think in terms of six hours and six years – we should make considerable progress in our awareness and willingness to take actions.

The focus is on IOOS. You will hear exciting capabilities – web-based, portal enabled, GIS architecture. Agri-business, pharmaceuticals, tourism, etc. will be able to get things similar to what they are used to getting from the National Weather Service.

NOAA is serious. VADM Lautenbacher has taken an international role in the Global Earth Observing System of Systems. You hear about taking the “pulse of the earth” from an article from this week's *Washington Post* – IOOS is an integral component. I take my cue from the Admiral. NOAA is prepared to take a strong leadership role and we want to do that in partnership with our various communities.

Those familiar with the report from the Ocean Commission – the report talks about NOAA taking a leadership role. This has to be a partnership. I am working hard at the interagency level; others are working with our communities to forge that partnership.

We all have to understand our measures of performance. We need to understand what our partners think are the right measures. We need to hear from the rest of the community. Congress and the public also need to hear it.

After lunch we will engage in active dialogue – NOAA folks are at each of the tables to hear what you have to say today.

Questions and Answers (During Tom Malone's Presentation)

Q: How are things (National Oceanographic Partnership Program, OCEAN.US, etc.) authorized?

A: Defense Authorization.

Q: In legislation, where did things get directed?

A: IOOS is covered by multiple Congressional committees. For example, in the House, Resources Committee is the lead committee with the House Science Committee also involved.

Q: Is Ocean.US considered a Federal office?

A: Yes, but there is no dedicated line item funding – the office is staffed with detailees from other organizations (NOAA, NSF, and Navy) with collateral duties – funding is provided through individual agencies. There are ten federal agencies (NOAA, Navy, NSF, NASA, MMS, USGS, DOE, USCG, USACE, and EPA) represented in OCEAN.US, NOAA is not the only one.

Q: How does the funding work?

A: House and Senate bills defines NOAA as lead agency for IOOS implementation.

Q: What is the process for the regional associations?

A: Regional groups have been funded recently to formulate business and governance plans that meet requirements specified by Ocean.US for being certified as a Regional Association. One of the requirements is that both data providers and users from public and private sectors must be involved in planning, implementing, operating and improving. The process has just begun, and it is expected that it will take 2-3 years for Regional Associations to form.

Q: What is considered the private sector? Commercial users included or not?

A: Users and suppliers are included, such as the shipping industry, fishing industry, insurance industry, and harbor pilots. We are early in the game and we can't address all the needs at once – it will be an ongoing process to engage all the stakeholders.

Today is a NOAA-specific sector discussion – if we are not bringing all the right stakeholders in, let us know.

Questions and Answers (During Tom Malone's Presentation)

Q: There are two bills – are they competing?

A: House version will have to be reconciled with the Senate bill passed one year ago – House bill came out later. They are similar but a lot has been learned since the Senate bill was written that was incorporated into the House bill.

Q: You mentioned the upcoming conference in August and the annual IOOS development plan – is that a synonym for a draft plan? Is there opportunity to comment on that plan for those who have not seen it? Will the plan be addressed at the national level?

A: We have a preliminary plan near completion. It is hard to get ten federal agencies to agree. The draft preliminary plan will be used as a starting point for discussion of IOOS implementation priorities. Subsequent to the conference, the plan will be revised and posted on the Ocean.US web site for public comment during October. There will be an announcement in the *Federal Register*, and we urge you to weigh in on the plan's recommendations at that time. Based on input during the public comment period, the plan will undergo a final revision before submission to the NORLC in December for approval. The plan will be updated annually. The current plan recommends that PORTS be a high priority building the national backbone of the IOOS.

Dr. Spinrad's comment – we are trying to walk the narrow line of having a plan with meat on it, but it has pre-decisional information about FY06-07 budget information – we want input from our stakeholders, but we cannot break the law about what is being planned – it puts the Ocean.US folks in a difficult position – nevertheless, we want to put something out. There are several tiers of engagement with the private sector – at the national level, regionally and in meetings like this that are targeted to NOS/NOAA clients.

Q: Will you give us guidance about how to interact with you about that plan?

A: Your comments and recommendations during the public comment period will be most welcome, and I can assure you that they will be taken seriously. The plan is an organic document and will be revised annually based on experience and input from all stakeholders. In the case of the marine navigational services community, there will be at least two main routes by which you can and should influence the development of IOOS, through NOAA-NOS and by participating in the development of Regional Associations.

Questions and Answers (During Tom Malone's Presentation)

Q: Are you working with international communities on ballast water issues, etc.?

A: Yes, we are working with the international community through IOC – developing an integrated strategy – I chair the international committee designing the coastal portion.

Q: Is IMO engaged?

A: Yes.

Q: Budget information – could you clarify each line item and which agency?

A: Enormous debate – NOAA is lead agency for most. Among highest priority is the enhancement of tide and data buoys

Dr. Spinrad's comment – there are inventories of existing systems - \$900 million in Federal investment – that report might help this community. We will send out information about this

Q: Is some of the funding going to PORTS?

A: Those things that you all are familiar with (PORTS, etc.) are included in the Federal agencies funding requests associated with IOOS – we believe we have to build on existing programs

Q: Regional Associations – you mentioned 12 in existence. You talked about them being created in 2003? Then you said they are in the process? We have concerns that grants have been issued, but marine navigation haven't been involved. I haven't seen PORTS as part of the regional associations.

A: Groups have been funded to begin work on meeting the requirements for becoming certified as a Regional Association. This process is just beginning, and we encourage you to get involved. We will also make sure that these groups reach out to your community. Information on this process can be found on the Ocean.US web site under NFRA.

Dr. Spinrad comment: We are here to listen and to make sure you are involved.

Q: Is appropriate representation of various user groups a requirement?

A: Yes, Margaret Davidson will speak to that in more detail during her panel session.

Questions and Answers (During Margaret Davidson's Panel Presentation)

Q: What region covers the Port of NY/NJ - Can someone else put together a proposal in Mid-Atlantic region?

A: I recommend you give Carolyn Thoroughgood (UDEL) a chance to get this started in that region. There are representatives here from MARA you can talk to. But yes, a proposal has to meet the requirements set out in the solicitation.

Q: This is where the rubber meets the road – I hear that the research organizations have the Regional Coordinators role – I think maritime organizations should have the role of Regional Coordinator – we have systems in place to do that. Ultimately Regional Associations receive funds - they will operate stations and the maritime organization is out of the loop. It seems like a university-based thing.

A: I agree that the maritime community is equally qualified – I hear that from some other organizations ... we need someone to step forward to take the lead and initiative to pull folks together.

Q: Maritime has been actively engaged in NOAA fundraising. It's hard not to think we have been left out and find a way to get past that perception.

A: Your comments are understood, but your comments don't hold for GoMOOS – the universities get some of the resources, but they get that funding under contract. The decisions are made by the Board of Directors, which have a representative from the harbor pilots – it's not a university driving it.

A: Solicitation for RAs is still open for adequate proposals – we would like to receive proposals for Pacific Region, New England and Caribbean. Deadline is in October.

Q: I want to support IOOS, but I need help – I am impressed with having NOAA's A-Team here – this is serious business. I need to sell my community that this is a grand idea and that I am not delusional – I think we can be part of the locomotive – we can come up with compelling reasons – I need to know when I come back home, that in Tampa Bay we are going to get that current meter fixed. What can we do to fix NWLON and PORTS and support IOOS too?

A: There is more than one way to sell things on the Hill – the amount of funding the academic community is getting is not coming out of your hide – if they get any funding for this, it must support your needs. We have to

Questions and Answers (During Margaret Davidson's Panel Presentation)

fund the national backbone – we have to collaborate with different agencies.

If we hear a year from now that the maritime industry is not engaged in the RA's then we will not fund them.

Q: You are asking for game playing – we have to wait a year?

A: As part of the fledgling RA, the Universities in the mid-Atlantic are committed to supporting and working with the maritime industry, and have been working with them. Structure has not been determined for Mid-Atlantic RA. Universities are not interested in running things – universities have new capabilities that can support IOOS.

A: From GoMOOS' perspective, it's appalling that NOAA can't get PORTS funded for \$3M, that's chump change. There are 7-8 different things in addition to navigation that PORTS could support – but these interests don't get together. Why don't we learn to speak with one voice?

Comment: Great Lakes node is formed around a partnership; the Great Lakes Commission is the lead. We have identified stakeholders by sectors and geography. We have taken time at existing forums to present the concept. We have been to their table. Now we need to invite them to our table. We are a month or two away from putting together a business plan – we will model off GoMOOS – our Board of Directors will be diverse and include maritime community. We are not research-based – this session has given me a lot of food for thought.

Q: Will PORTS funding be part of this pot (of funding requested in Obs bill)? Are you including the required \$3M?

A: We have Congressional language regarding the intent of government to fund PORTS.

Comment: If local funders smell that the Feds will fund something, they will dry up local funds.

Q: Guest list for the Regional Associations – is there some portion of representation prescribed? How do you determine if they are doing it right?

Questions and Answers (During Margaret Davidson's Panel Presentation)

A: Guidance is that they should base the guest list on the different activities that support that region, based on economic considerations.

A: In our region, we send out broad representations, but representation is based on who shows up ... we are all very busy and sometimes we can't get the right folks in the room even if they have been invited.

Comment: Woods Hole Group is an ops and maintenance contractor (for PORTS). We see a chance to bring the private sector into a Regional Association. We have been working on a voluntary basis to scope out what is possible – we need this type of cooperation.

Q: What about the competitive process for setting up the Regional Association? In a region, you could have multiple excellent proposals and only one would be selected – if two come in – one from university and one from industry – when it comes down to who has time to put into it – is there funding to involve others?

A: All the “chump change” (grants issued thus far) is to begin the dialogue in a region – which groups needs to play, how do we play, etc. No one is being funded to put together a proposal – funding is for developing regional framework, not for collecting data or attending meetings. At the end, there should be a governance structure.

A: Our by-laws have specific guidelines about conflict of interest – you can't have voting rights over issues that affect you financially.

You've heard about the Global Earth Observing System of Systems (GEOSS) – talk about big money (billions). The real problem is that the national leadership doesn't get the IOOS concept – they don't understand why hydrographic data is necessary for coastal oceans, for example. We can all agree that the tide and water data is important. Help us get at the table of this larger effort regarding the need for important things in the coastal waters.

Participant Input

What are the key messages we heard this morning?

Table 1:

- Maritime Industry disenfranchised
- Solicitation of maritime industry
- Confusion
- Program is acceptable / process is unacceptable

Table 2:

- It's still early enough to get involved
- Maritime industry is considered an important player
- An IOOS that doesn't serve the basic needs of the maritime industry or general public is a failure
- Funding is essential

Table 3:

- Concern with questions of "competition" regarding setting agenda - need to ensure broad participation and enforce requirements
- Invitation to maritime community feels late in coming – just hearing about IOOS
- No matter who gets it – the point is to include appropriate folks – need even handed approach towards engagements
- Need industry because of experience with business plans and marketing – neither academics nor Feds are any good at this
- Mid-Atlantic folks feel "left out"
- Need to publicize the GoMOOS and Alaska examples
- Stakeholder participation = perception of how much stake they have / will get
- Concern about maintaining "bird in hand" – existing backbone – afraid that it will get pushed aside
- Need to know more about the "backbone" – who decides, how does it get better funded

Table 4:

- IOOS has a national and a regional focus
- Maritime community feels left out
- NOAA is making a sincere effort to address concerns of maritime community; the door is still open
- Biggest stakeholders are customers of shipping industry
- May be funding through IOOS for PORTS

Participant Input

What are the key messages we heard this morning?

Table 5:

- New and exciting opportunity. Very important issue but details of implementation need to be discussed
- Lots of concern on the process of developing these Regional Associations
- Disconnection between “stakeholders” and those in charge and in control. Educational institutes not always the best to bring everyone together.
- What is budget impact to other programs – PORTS? Is the same pie just being sliced thinner?
- Regionalization causes segmentation in implementation

Table 6:

- We need to stand united as a voice with our self interests in mind
- Awareness on a local level as well as on the global level, is lacking
- A lot of “cars” on the train to be hooked up before train can run
- NOAA should fully fund “PORTS,” the backbone of what is trying to be built on
- Global weather research is not recognizing that coastal waters / hydrography are important factors within the system

Table 7:

- Still a concept
- There are existing systems that can / need to be integrated
- Coastal regional groups play an important part in concept
- Regional groups need to work together with NOAA so that proposals to the U.S. government are heard and understood – and then implemented

Dr. Richard Spinrad's Recap from the Morning

I've seen encouraging things in terms of the level of engagement here. There are a few themes that are emerging. Several of you have mentioned that IOOS is important and exciting. We've also been hearing about how to ensure that we have the maritime industry in the IOOS information loop.

It is clear that the maritime community feels left out – as one group put it, the program is acceptable, process is unacceptable.

I think a real question is how to get the maritime community into the decision loop. We need to build the maritime requirements into the process. We need to stay united and of one voice. Unification of priorities and requirements would be very good.

Another issue is how to sustain a level of effort for IOOS and maritime community – how to address long-term connectivity. This concerns sustainability of PORTS and how to maintain the existing backbone. You are asking, "Is this the same pie being sliced differently?"

There was an interesting comment about how to get sustained visibility and communication.

I want to emphasize another point. From the US Ocean Commission on Ocean Policy report, the U.S. can be divided in many ways regionally. The EPA, Army Corps of Engineers, and U.S. Fish and Wildlife Service each has a completely different regional configuration. Why am I bringing this up? There is an emphasis on regionalization. We can either wait and see what emerges from legislation, Congressional earmarks, etc., and then force fit what we want to do with Regional Associations OR we can move ahead more quickly and get agreement on some principles.

I am trying to frame the conversation in the larger context. I want to strive to get past who do I call and how do we work together. I also want folks to feel included in the process.

Participant Input

What are the 1-3 most important data products and services the IOOS should address over the next 3 years?

Note: Table 3 participants merged with other tables.

Table 1:

- PORTS (real-time measurements of currents, water levels, and winds)

Table 2:

- Real-time tides and currents, including air gap measures
- Constantly updated high resolution water depth maps
- Real-time water temperature and salinity

Table 4:

- PORTS tides, currents, salinity, wind, and temperature
- Increased accessibility to data
- Integrated AIS / security

Table 5:

- Fully funded PORTS / more of them
- Air gap technology implemented
- Surface current mapping – to show sea states at small scale resolution
- Making information available to public – easy to access

Table 6:

- Tide / water level and predictions there of
- Currents along coastal regions (helpful for search and rescue – oil spill tracking, etc.)
- Hydrographic surveys

Individual:

- PORTS
- Enhancements to increased deployment PORTS
- Increased access / operability for users

Participant Input

What are the 1-3 most important steps for NOAA to take to successfully implement IOOS?

Table 1:

- Develop and implement mechanics to include all important stockholders
- Secure sustained core funding for the backbone
- Develop and demonstrate criteria to federalize three regional programs into IOOS – make the membership model clear and explicit

Table 2:

- Implement the three commitments
- Secure congressional and administration support for coastal IOOS
- Secure industry advocacy

Table 4:

- Expand participation
- Increase education and outreach
- Integrate existing observation systems

Table 5:

- Engage the maritime community
- More clearly articulate the cost and value of IOOS for the various user groups

Table 6:

- Include maritime transportation community
- Make it a top priority to assure sustained financing of existing systems (i.e. PORTS, NWL)
- Endorse regional approach, provided each industry has a voice within that region

Individual:

- Expand the tent
- Increase the outreach
- Engage the Hill

Participant Input

What are the 1-3 most important steps for the marine navigation services community to take to successfully implement IOOS?

Table 1:

- Work with NOAA to fully fund PORTS
- To make existing operable elements fully functional – provide to turn them on and keep them on
- To expand and enhance PORTS

Table 2:

- Educate and lobby elected officials, educate the public
- Implement the four commitments

Table 4:

- Invest in strategies and use IOOS to better serve customers
- Improve profitability

Table 5:

- Engage themselves
- Ensure needs are clearly articulated

Table 6:

- Participate in the meetings
- Agree to work toward the common message
- Support NOAA as the backbone for IOOS and lobby for appropriate support

Individual:

- Listen to users
- Identify markets
- Invest in R & D

Participant Input

What are the 1-3 most important measures of success for our joint implementation of IOOS? How will we know we have successfully implemented IOOS together?

Table 1:

- A sustained "PORTS"
- A sustained fully funded backbone and fully integrated regional programs and clear and explicit criteria for membership

Table 2:

- A working system, producing useful data, is in place
- Shows it saves money and saves lives (measure of success)
- A level of trust has been developed between government and private sector / public

Table 4:

- Industry usage and acknowledgement
- Long term sustainability
- Economic benefit

Table 5:

- Performance measures achieved - reduction in groundings, oil spills, additional tons loaded - maximizing effectiveness of ships
- Maritime community participates on all Regional Associations and national committees

Table 6:

- Real time systems are maintained and funded
- Real time systems are integrated with other systems
- The next meeting is attended by maritime transportation members who felt welcomed from the get-go

Individual:

- Measurable improvement to safety, economic benefit, and environmental stewardship
- Long term sustainability
- Sector harmony

Individual Input

Do you have any additional input that you want us to consider in implementing IOOS successfully?

M. Bruno

- In the future, please insure that time is afforded to discuss how IOOS will help the local interests, in this case, the Port of New York / New Jersey.
- Please look into having both IOOS and the mid-Atlantic region briefed to the New York Harbor Operations Committee.

Fred Spiess

- Good meeting.
- Resolved some ambiguity on the Regional observation systems.
- Backbone was given less attention than it deserves.
- Rough ideas about expectations of funding for various sectors (would vary by region?)

James Miller

- Must have the funding and need for the data. Must have the support for need.
- Support from Maritime Associations / Pilot Associations / shipping and work boat companies / Maritime Sciences Departments in Universities / Government
- Must have a big demand to provide the product to support the program.

Steve Whelan

- Despite the appropriate creations of RA's and ROOS's , the most immediate, most visible bang for the buck should come through delivery of the national backbone.
- Integrate existing Ocean Observing programs to show the vision and tangible benefits.

Helen Brohl's Closing Remarks

Thanks to NOAA folks – Marcia Weeks and Gary Magnuson for handling the meeting arrangements. They simplified the process to put a real professional meeting together with a great facilitator doing a great job.

We really appreciate everyone stepping up and appreciating the need to take care of the backbone.

Dr. Richard Spinrad's Closing Remarks

We have come a long way in the past two months.

We will reinvigorate the documentation of the socio-economic benefits of this kind of system – we're going to do that and we need your help getting the data and the anecdotes.

We are going to be putting together discussions with other sectors. We wanted to work this sector first – it's a vital sector to NOS. We need some kind of mechanism to keep this going. I'd like to take this kind of group and develop a means for a half-day conference specific to maritime community and NOS. This is not something I am saying to each of our sector groups. This sector needs this type of forum to support NOAA's leadership role.

I really appreciate every one of you for taking time and vigorously participating today. I will keep communication lines open – and I will follow-up with many of you on specific topics.

It's been a terrific first year for me at NOS.

Thanks to Cindy Zook and NOS staff for making the conference so productive. Today was very candid, very revealing and very productive. We have recorded the following commitments to take away from this meeting.

NOAA Commitments

1. Include a maritime representative at the table in reviewing future proposals for Regional Associations.
2. Require that a maritime representative be at the table of each Regional Association planning meeting.
3. Include a maritime representative on the staff of Ocean.US.
4. Continue ongoing dialogue with maritime community.